

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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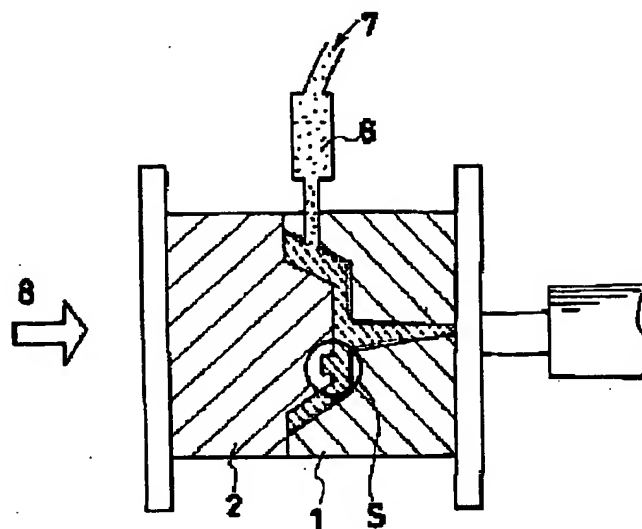
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TITLE : IN-MOLD PAINTING METHOD OF  
THERMOPLASTIC RESIN



ABSTRACT : PURPOSE: To prevent the sink shape of the painting surface of a molded product by sending paint into a mold to form a film on the painting surface of the molded product composed of a thermoplastic resin.

CONSTITUTION: The temp. of a mold consisting of a fixed mold 1 and a movable mold 2 is set to about 130°C and a resin material plasticized and melted at about 280°C is injected into an injection cylinder 3 in the same molding process as a usual injection molding process. At this time, clamping force 8 is applied in order to prevent that the molds 1, 2 are overcome with injection pressure to be opened to generate flash. The resin material flowing in the mold in a molten state reaches temp. suitable for curing paint about 40 sec after the resin material flows in the mold to be cooled and solidified. Since the flow of the resin material in the mold is already stopped at this point of time, the clamping force 8 is reduced in order to form a gap permitting the paint to enter between the mold 1 and a molded product 5. By this constitution, molding defect due to a sink or many manhours of water sanding processes can be eliminated.

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